

BIOGRAPHICAL SKETCH

NAME: Mark Hoon, PhD

POSITION TITLE: Tenure-track Investigator, NIH, NIDCR

<u>EDUCATION</u>	<u>DEGREE</u>	<u>YEAR</u>	<u>FIELD OF STUDY</u>
University of Leeds Leeds, UK	PhD	1990	Biochemistry
University of Birmingham, UK	B.Sc (Hons)	1986	Biochemistry

RESEARCH AND PROFESSIONAL EXPERIENCE

December 2006- present	Tenure-track, NIDCR, NIH, Bethesda, MD
July 1999- Dec 2006	Staff Scientist, NIH, Bethesda, MD
July 1997-July 1999	Visiting associate, NIH, Bethesda, MD
July 1992-July 1997	Visiting fellow, NIH, Bethesda, MD
Aug 1990-July 1992	NATO postdoc fellow, Univ. Freiburg, Germany

PUBLICATIONS

Mishra SK and Hoon, MA. (2013) The Cells and Circuitry for Itch Responses in Mice. *Science*, 340: 968-971.

Pogorzalla L, Mishra SK and Hoon MA. (2013) The cellular code for mammalian thermosensation. *Journal of Neuroscience*, 2013 33: 5533-41.

Mishra SK, Holzman S and Hoon MA. (2012) A nociceptive signaling role for neuromedin B. *Journal of Neuroscience*, 32: 8686-95.

Kaszas K, Keller JM, Coddou C, Mishra S, Hoon M, Stojilkovic S, Kenneth A. Jacobson KA and Iadarola MJ (2012) Small molecule positive allosteric modulation of TRPV1 activation by vanilloids and acidic pH. *Journal of pharmacological and experimental therapeutics*, 340: 152-60.

Mishra SK, Tisel S, Orestes P, Bhangoo S, Hoon MA. (2011) TrpV1-lineage neurons are required for thermal sensation. *EMBO Journal*, 30: 582-93.

Mishra SK & Hoon MA. (2010) Ablation of TrpV1 neurons reveal their selective role in thermal pain sensation. *Molecular and Cellular Neuroscience*, 43: 167-172.

Chandrashekar, J., Hoon, M. A., Ryba, N. J. P., Zuker, C. S. (2006) The Biology of Mammalian Taste Receptors and Cells. *Nature*: 444: 288-294.

Huang, A. L., Chen, X., Hoon, M. A., Chandrashekar, J., Trankner, D., Ryba, N. J. P., Zuker, C. S. (2006) The Cells and Logic for Mammalian Sour Taste detection. *Nature*: 442: 934-938.

Mueller, K. L., Hoon, M. A., Erlenbach, I., Chandrashekar, J., Zuker, C. S., and Ryba, N. J. P. (2005) The receptors and coding logic for bitter taste. *Nature* 434: 225-229.

Zhao, G. Q., Zhang, Y., Hoon, M. A., Chandrashekar, J., Erlenbach, I., Ryba, N. J. P., and Zuker, C. S. (2003) The receptors for mammalian sweet and umami taste. *Cell* 115: 255-266.

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different receptor cells sharing similar signaling pathways. *Cell* 112: 293-301.

Nelson, G., Chandrashekar J., Hoon, M.A., Feng, L., Zhao, G., Ryba N., Zuker C. (2002) An amino-acid taste receptor. *Nature* 416: 199-202.

Hoon, M.A., Ryba, N.J.P. (2001) Mammalian taste receptors. *Methods in chemosensory research* (Ed. Simon, S.A. & Nicollelis, M.A.L.) CRC Press. 143-68.

Chandrashekar, J., Mueller K., Hoon M.A., Adler, E.A., Feng, L., Guo, W., Zuker, C.S., Ryba, N.J.P. (2000) T2Rs function as bitter taste receptors. *Cell* 100: 703-11.

Adler, E.A., Hoon, M.A., Mueller, K., Chandrashekar, J., Ryba, N.J.P., Zuker, C.S. (2000) A novel family of mammalian taste receptors. *Cell* 100: 693-702.

Hoon, M.A., Adler,E., Lindemeier, J., Battey, J.F., Ryba, N.J.P., Zuker, C.S. (1999) Putative mammalian taste receptors: A class of taste-specific GPCRs with distinct topographic selectivity. *Cell* 96: 541-51.

Hoon, M.A., Ryba, N.J.P. (1997) Analysis and comparison of partial sequences of clones from a taste-bud-enriched cDNA library. *J Dental Research* 76:831-37.

Hoon, M.A., Northup, J.K., Margolskee, R.F., Ryba, N.J.P. (1995) Functional expression of the taste specific G-protein, α -gustducin. *Biochem J* 309: 629-36.

Tadros, M.H., Katsiou, E., Hoon, M.A., Yurkova, N., Ramji, D.P. (1993) Cloning of a new antenna cluster and expression analysis of the antenna gene family of *Rhodopseudomonas pallustri*. *Euro J Biochem* 217: 867-75.

Ryba, N.J.P., Hoon, M.A., Findlay, J.B.C., Saibil, H.R., Wilkinson, R., Heimburg, T, Marsh, D. (1993) Rhodopsin mobility, structure and lipid-protein interaction in outer segment membranes from *Loligo forbesi*. *Biochemistry* 32: 3298-3305.

Hall, M.D., Hoon, M.A., Ryba, N.J.P., Pottinger, J.D.D., Keen, J.N., Sabil, Findlay, H.R. (1991) Molecular cloning and primary structure of squid (*Loligo forbesi*) rhodopsin, a phospholipase-directed G-protein Linked receptor. *Biochem J* 274: 35-40.

Moderator of the NIH Pain Interest Group

Invite, host and introduce speakers for monthly PiG meetings. This is a NIH wide interest group with an audience that includes groups from most institutes and centers. Intramural and extramural staff is invited.

Vice-chair NIDCR ACUC

This committee authorizes animal experiments within NIDCR and sets policy for animal care ; including review of animal protocols, the program and standard practices. Duties include monthly meetings and biannual inspections of facilities. Additionally, I serve as alternate for the NIH ARAC committee (determines policy for all intramural NIH animal care).

DVR ACUC

This committee authorizes animal experiments for the Division of Veterinary Research (DVR) and sets policy for care within DVR and NCATS including review of animal protocols, the animal program and standard practices. DVR is the largest provider of animal facilities on the NIH campus. Duties include monthly meetings and biannual inspections of facilities (3 days of inspections).